

# Air conditioning system with built-in intermediate heat exchanger with two different types of refrigerants circulated.

**Patent number:** EP0675331  
**Publication date:** 1995-10-04  
**Inventor:** OZU MASAO (JP); SANO TETSUO (JP); FURUHAMA KOKICHI (JP)  
**Applicant:** TOKYO SHIBAURA ELECTRIC CO (JP)  
**Classification:**  
 - international: F25B25/00; F25B29/00; F25D17/02  
 - european: C09K5/04B, C09K5/04B2, C09K5/04B4B, C09K5/08, F25D17/02, F25B7/00, F25B9/00B4, F25B13/00, F25B25/00B  
**Application number:** EP19950103338 19950308  
**Priority number(s):** JP19940061632 19940330

## Also published as:

JP7269964 (A)  
 EP0675331 (A3)  
 EP0675331 (B1)

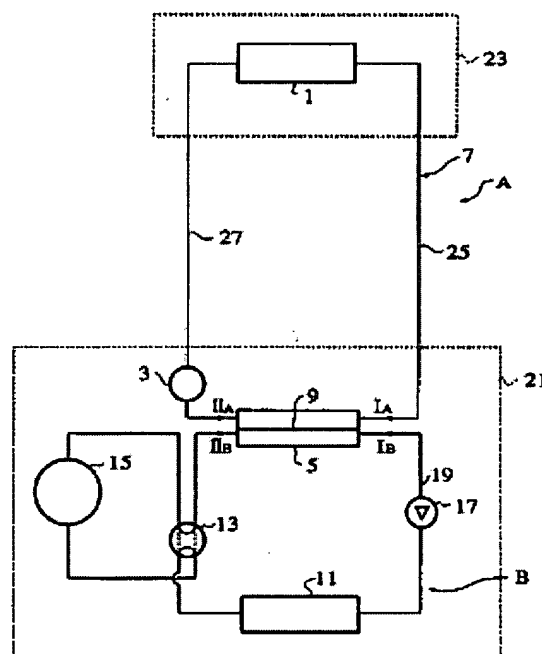
## Cited documents:

US4344296  
 US5042262  
 EP0516093  
 US5272878  
 FR2296829  
 more >>

## Abstract of EP0675331

An air conditioning system in which each alternative refrigerant can be fully utilized so as to present as much as actual COP in comparison with the conventional HCFC22 and to achieve safe use as operating refrigerants. The air conditioning system includes: a first refrigerant circuit (A) in which a first refrigerant circulates, the first refrigerant circuit including: an indoor heat exchanger (1); and a fluid drive unit (3), connected to the indoor heat exchanger by way of a first piping, which drives the first refrigerant; a second refrigerant circuit (B) in which a second refrigerant circulates, the second refrigerant circuit including: a compressor (15) which compresses the second refrigerant; an expansion valve (17), connected to the compression means, for expanding the second refrigerant; and an outdoor heat exchanger (11) connected to the compressor and the expansion valve by way of a second piping; and an intermediate heat exchanger (5) for heat-exchanging between the first refrigerant in the first refrigerant circuit and the second refrigerant in the second refrigerant circuit.

FIG. 1



Data supplied from the esp@cenet database - Worldwide